

CLAIMS

1. A method for detecting a signal, the method comprising acts of:
determining a first method for detecting the signal;
- 5 determining at least one rule associated with the first method for detecting the signal, the rule defining at least one parameter that, when evaluated, determines how the first method for detecting is used to detect the signal.
- 10 2. The method according to claim 1, further comprising acts of determining a second method for detecting the signal, and determining at least one rule associated with the second method for detecting the signal, the rule defining at least one parameter that, when evaluated, determines how the second method for detecting is used to detect the signal.
- 15 3. The method according to claim 2, further comprising an act of determining, based on at least one of the at least one rule associated with the first method for detecting the signal and at least one rule associated with the second method for detecting the signal, which of the first and second detecting methods is used to detect the signal.
- 20 4. The method according to claim 2, further comprising an act of providing a user a capability to choose one of the first and second detecting methods to detect the signal.
- 25 5. The method according to claim 1, wherein the at least one rule indicates that the signal should not be observed, and wherein the method further comprises an act of evaluating whether the signal should be detected using the at least one rule.
6. The method according to claim 1, wherein the at least one rule indicates that the signal should be assigned default observation parameters that define how the signal is observed, and wherein the method further comprises an act of evaluating whether the signal should be detected using the at least one rule.
- 30 7. The method according to claim 1, wherein the at least one rule indicates that at least one other rule should be evaluated with the at least one rule, and wherein the method

further comprises an act of selecting one of the at least one rule and the at least one other rule having the most difficult solution to detect the signal.

8. The method according to claim 1, wherein the at least one rule indicates that at 5 least one other rule should be evaluated with the at least one rule, and wherein the method further comprises an act of selecting one of the at least one rule and the at least one other rule having the least difficult solution to detect the signal.

9. The method according to claim 1, further comprising an act of determining, for the 10 first method for detecting the signal, a corresponding revisit time for observing the signal.

10. The method according to claim 2, comprising an act of determining, for the second method for detecting the signal, a corresponding revisit time for observing the signal.

15 11. The method according to claim 7, wherein the act of selecting one of the at least one rule and the at least one other rule having the most difficult solution to detect the signal includes an act of determining a corresponding revisit time associated with each of the first method and second method for detecting the signal, and selecting the method having a lesser value of revisit time.

20 12. The method according to claim 8, wherein the act of selecting one of the at least one rule and the at least one other rule having the least difficult solution to detect the signal includes an act of determining a corresponding revisit time associated with each of the first method and second method for detecting the signal, and selecting the method having a lesser value of revisit time.

25 13. A computer-readable medium having computer-readable signals stored thereon that define instructions that, as a result of being executed by a computer, instruct the computer to perform a method for detecting a signal, the method comprising acts of:
30 determining a first method for detecting the signal;

determining at least one rule associated with the first method for detecting the signal, the rule defining at least one parameter that, when evaluated, determines how the first method for detecting is used to detect the signal.

5 14. The computer-readable medium according to claim 13, further comprising acts of determining a second method for detecting the signal, and determining at least one rule associated with the second method for detecting the signal, the rule defining at least one parameter that, when evaluated, determines how the second method for detecting is used to detect the signal.

10 15. The computer-readable medium according to claim 14, wherein the method further comprises an act of determining, based on at least one of the at least one rule associated with the first method for detecting the signal and at least one rule associated with the second method for detecting the signal, which of the first and second detecting methods is used to detect the signal.

15 16. The computer-readable medium according to claim 14, wherein the method further comprises an act of providing a user a capability to choose one of the first and second detecting methods to detect the signal.

20 17. The computer-readable medium according to claim 13, wherein the at least one rule indicates that the signal should not be observed, and wherein the method further comprises an act of evaluating whether the signal should be detected using the at least one rule.

25 18. The computer-readable medium according to claim 13, wherein the at least one rule indicates that the signal should be assigned default observation parameters that define how the signal is observed, and wherein the method further comprises an act of evaluating whether the signal should be detected using the at least one rule.

30 19. The computer-readable medium according to claim 13, wherein the at least one rule indicates that at least one other rule should be evaluated with the at least one rule, and

wherein the method further comprises an act of selecting one of the at least one rule and the at least one other rule having the most difficult solution to detect the signal.

20. The computer-readable medium according to claim 13, wherein the at least one
5 rule indicates that at least one other rule should be evaluated with the at least one rule, and wherein the method further comprises an act of selecting one of the at least one rule and the at least one other rule having the least difficult solution to detect the signal.

21. The computer-readable medium according to claim 13, wherein the method further
10 comprises an act of determining, for the first method for detecting the signal, a corresponding revisit time for observing the signal.

22. The computer-readable medium according to claim 14, wherein the method further
comprises an act of determining, for the second method for detecting the signal, a
15 corresponding revisit time for observing the signal.

23. The computer-readable medium according to claim 19, wherein the act of selecting
one of the at least one rule and the at least one other rule having the most difficult solution
to detect the signal includes an act of determining a corresponding revisit time associated
20 with each of the first method and second method for detecting the signal, and selecting a
method having a lesser value of revisit time.

24. The computer-readable medium according to claim 20, wherein the act of selecting
one of the at least one rule and the at least one other rule having the least difficult solution
25 to detect the signal includes an act of determining a corresponding revisit time associated
with each of the first method and second method for detecting the signal, and selecting a
method having a lesser value of revisit time.